

Comparing Aquatic & terrestrial Food Production

3.5.2 Compare and contrast the efficiency of terrestrial and aquatic food production systems

	Efficiencies	Inefficiencies
Terrestrial	<ul style="list-style-type: none">* MOST FOOD IS HARVESTED AT A LOW TROPHIC LEVEL (PRODUCER & PRIMARY CONSUMER)<ul style="list-style-type: none">↑ HERBIVORES (COWS, CHICKENS, DEER, ETC)* PROVIDE PROTEINS* CAN BE MADE INTO MANY PRODUCTS* CATTLE ALSO USED FOR WORK	<ul style="list-style-type: none">* ONLY 10% OF ENERGY MOVES UP TROPHIC LEVELS (10% RULE)* LOTS OF GRAIN (PRODUCER) NEVER MAKES IT TO HUMAN CONSUMPTION → LOST IN HARVESTING, PROCESSING + AS ANIMAL FEED* EATING MEAT IS HIGHLY INEFFICIENT TAKES LOTS OF WATER, FOSSIL FUEL, GRAIN, & ENERGY
Aquatic	<ul style="list-style-type: none">* ENERGY MOVING UP TROPHIC LEVELS MORE EFFICIENT (LESS BIOMASS IN AQUATIC ORGANISMS)* PROVIDE PROTEINS	<ul style="list-style-type: none">* FOOD IS HIGHER TROPHIC LEVEL (BIG FISH)* LONG FOOD CHAINS IN AQUATIC SYSTEMS* PRODUCTIVITY IS LESS EFFICIENT IN AQUATIC SYSTEMS → LIGHT IS REFLECTED + ABSORBED BY WATER* WE THROW AWAY ABOUT 30 MILLION TONNES OF BYCATCH A YEAR.